



KIDCOIN

2024-2025

Software Process Modeling

Sprint #2

Team Members:

- Bouthainh AlGarni | 2211249
- Dimah Aloufi | 2210094
- Joud Mozahem | 2212477
- Joud Bahkali | 2210859
- Shahad AlGhamdi | 2210076
- Israa Bamarouf | 2211682

Instructors:

- Dr. Latifah Alharthi
- Dr. Muna aldhurawi



Story Backlog – Sprint #2

Sprint #2: Features for Sprint #2

Component Name: Set Budget

Story Name: Setting up the Budget for the children

Story Sequence No: 009

Story Short Description: Parents can set the budget for the child, while registration

Story Long Description: In the "Set Budget" component, parents can assign a specific budget for each child during registration. This budget is linked to the child's profile, stored in firebase, and accessible on the child's profile page for tracking spending against the set limit. Parents can update the budget as needed to adjust financial goals over time

Component Name: Set Mood

Story Name: Setting up the budgeting mood for the children

Story Sequence No: 010

Story Short Description: Parents can set the budgeting mood for the child, while registration

Story Long Description: In the "Set Mood" component, parents can select a budgeting mood for each child during registration, such as "Captain Saver," "Captain Balanced," "Captain Funster," or "Captain Essential," or "Captain Foodie." Each mood represents a unique budgeting approach, influencing how the child prioritizes spending across categories. The selected mood is saved to the child's profile and can be updated later to reflect evolving financial goals

Component Name: Child Login

Story Name: Login for Children

Story Sequence No: 011

Story Short Description: Children can log in using their unique ID

Story Long Description: Children shall log in to the app using a unique ID generated by the system during the registration process. This ID, visible only to the parent, provides secure access for the child and ensures a smooth, authenticated experience. The child simply enters the provided unique ID to access their own profile, minimizing friction and enhancing security. This process ensures that only authorized users gain access to the child's profile, allowing them to engage safely and independently within the app

Component Name: Money Management

Story Name: Child Spending Management

Story Sequence No: 012

Story Short Description: Children track their spending

Story Long Description: Children shall track their spending by selecting the appropriate category when making a purchase or spending within the app. The system shall handle and update the budget list accordingly

Component Name: Money Management Tips

Story Name: Generating Money Management Tips

Story Sequence No: 013

Story Short Description: Provide tips for better money management

Story Long Description: The system shall generate helpful tips to encourage children to improve their money management skills and spend responsibly

Prioritize stories and define sprints:

Sprint #2:

Component name	Priorities
1. Child login	High
2. Set Budget	High
3. Set Mood	High
4. Money Management	High
5. Money Management Tips	Low

Sprint #2 - Meeting(s)

Project Name: KidCoin

Project Members:

- Dimah Aloufi
- Bouthainh AlGarni
- Israa Bamarouf
- Joud Mozahem
- Joud Bahkali
- Shahad Alghamdi

Sprint #2: Stand up Meeting \# [26/10/2024]

Sprint Duration: 1 Week

Scrum Master: Shahad

Client: Dr. Latifah Alharthi

Pair Programmers:

- Bouthainh AlGarni & Shahad Alghamdi
- Dimah Aloufi & Joud Bahkali
- Israa Bamarouf & Joud Mozahem

Sprint #2: Final Sprint Meeting #2 [29/10/2024]

Sprint Duration: 1 Week

Scrum Master: Bouthainh

Client: Dr. Latifah Alharthi

Pair Programmers:

- Bouthainh AlGarni & Shahad Alghamdi
- Dimah Aloufi & Joud Bahkali
- Israa Bamarouf & Joud Mozahem

Stories: All stories for Sprint #2

Component Name	Story Sequence Number	Use Cases (e.g., functionalities)
Set Budget	009	Parents can set the budget for the child, while registration
Set Budgeting Mood	010	Parents can set the budgeting mood for the child, while registration
Child Login	011	Child can log into the app using the unique ID generated during their registration by the parent
Money Management	012	Children shall track their spending by selecting the appropriate category when making a purchase or spending within the app. The system shall handle and update the budget list accordingly
Money Management Tips	013	The system shall generate helpful tips to encourage children to improve their money management skills and spend responsibly

Follow-up meeting questions:

1. What has been completed since the last meeting?

Since the last meeting, we have continued to develop the app by adding new features, thoroughly examining their functionality to ensure a seamless user experience, and implementing a child login to enhance engagement and drive the app's growth in alignment with our vision.

2. What are you going to be working on next?

Next, we will continue implementing more desired features while also starting the development of the space game. Additionally, we will focus on structuring the interfaces correctly to enhance usability and overall user experience.

3. Do you have any issues/impediments?

We welcome any challenge with passion and enthusiasm. Recently, we faced some difficulties displaying each child's budget due to the absence of a dedicated login page for kids. However, we successfully developed the child login feature, and we're happy to report that everything is now working as expected, ensuring smoother functionality throughout the system.

Task Allocation

Student Name	Accomplished Tasks	Hours Completed for Each Task
Dimah Aloufi	<ul style="list-style-type: none"> ○ Tips class code ○ Creating/Test all test cases for Tips class code 	<ul style="list-style-type: none"> ○ 4 hours for coding ○ 3 hours for trying all the test cases
Bouthainh AlGarni	<ul style="list-style-type: none"> ○ Set Budget Code ○ Set Mood code ○ Modeling a sequence diagram for Set Budget class ○ Creating/Test all test cases for Set Budget code 	<ul style="list-style-type: none"> ○ 8 hours for coding ○ 1 hours for modeling the sequence diagram ○ 1 hours for trying all the test cases
Israa Bamarouf	<ul style="list-style-type: none"> ○ Child login class code ○ Modeling a sequence diagram for Child login class 	<ul style="list-style-type: none"> ○ 6 hours for coding ○ 2 hours for modeling the sequence diagram
Joud Muzahum	<ul style="list-style-type: none"> ○ Child login code ○ Creating/Test all test cases for Child login code 	<ul style="list-style-type: none"> ○ 6 hours for coding ○ 3 hours for trying all the test cases
Joud Bahkali	<ul style="list-style-type: none"> ○ Tips class code ○ Modeling a sequence diagram for Tips class 	<ul style="list-style-type: none"> ○ 4 hours for coding ○ 2 hours for modeling the sequence diagram
Shahad Alghamdi	<ul style="list-style-type: none"> ○ Money Management Code ○ Set Mood code ○ Modeling a sequence diagram for Money Management class ○ Creating/Test all test cases for Money Management code 	<ul style="list-style-type: none"> ○ 9 hours for coding ○ 2 hours for modeling the sequence diagram ○ 2 hours for trying all the test cases

Sprint #2 - Test Cases(s)

Sprint #1 Test Cases - [10/28/2024]

Test Case Name: Sprint #2 – Child Login

Test Case ID: KidCoin – Child Login

Test Case No.	Test Case Description	Expected Results	Outcome (Pass/Fail/Other Comments)
TC001	Child enters the correct unique ID generated by the system during registration and clicks the login button	The child is successfully logged in, and the KidCoin budget dashboard is displayed (That includes welcoming the child and display of budget and categories)	Pass
TC002	Child enters an incorrect or non-existent unique ID and clicks the login button	An error message appears stating, "Incorrect unique ID" access is denied	Pass
TC003	Child leaves the unique ID field empty and clicks the login button	An error message appears "Please enter your unique ID" prompting the child to enter the unique ID	Pass

Sprint #2 Test Cases - [10/28/2024]

Test Case Name: Sprint #2 – Child Spending Management

Test Case ID: KidCoin – Money Management

Test Case No.	Test Case Description	Expected Results	Outcome (Pass / Fail / Other (Comments))
TC001	Child spends money from one of the categories and checks the total remaining budget	The app should show the updated total remaining budget based on the spending in each category	Pass
TC002	Child spends an amount exceeding the available balance in a category (e.g., trying to spend \$50 on Food & Snacks)	The system should display an error message: "Insufficient funds in this category"	Pass
TC003	Child spends \$0 in any category	The system should not update the amounts in any category and should display a message: "No spending amount entered"	Pass
TC004	Child attempts to spend a negative amount (e.g., -\$10) in any category	The system should display an error message: "Amount cannot be negative"	Pass

Sprint #2 Test Cases - [10/28/2024]

Test Case Name: Sprint #2 – Budget Calculation Based on Manually Set Mood

Test Case ID: KidCoin – Set mood

Test Case No.	Test Case Description	Expected Results	Outcome (Pass / Fail / Other (Comments))
TC001	Parent selects the mood from one of the provided five moods	The system should assign a budget with the suitable percentage based on the selected mood	Pass
TC002	Parent selects "captain saver" mood and then changes it to "captain funster" mood	The system should recalculate the budget allocation according to the new mood	Pass
TC003	Parent leaves the mood selection blank and submits a total budget	The system should display an error message “please select a mood” prompt the parent to select a mood before proceeding with budget allocation	Pass

Sprint #2 Test Cases - [10/28/2024]

Test Case Name: Sprint #2 – Set budget

Test Case ID: KidCoin – Set budget

Test Case No.	Test Case Description	Expected Results	Outcome (Pass / Fail / Other (Comments))
TC001	Parent enters total amount and submits, ensuring the system calculates the correct amount for each category	System should divide the total correctly based on the chosen mood	Pass
TC002	Parent enters total amount of 0 for the child and submits	The system should display an error message "please enter valid budget"	Pass
TC003	Parent try's to enters a negative total amount (e.g., -50) for the child	The system allow only numbers	Pass
TC004	Parent leaves the total amount blank and submits	The system should display a message: "Please enter a budget"	Pass
TC005	Parent updates the total amount	The system should recalculate the categories based on the updated total amount	Pass
TC006	Parent enters an unusually large total amount (e.g., 1,000,000) for the child and submits	The system should handle large amounts correctly and divide them into categories	Pass

Sprint #2 Test Cases - [10/28/2024]

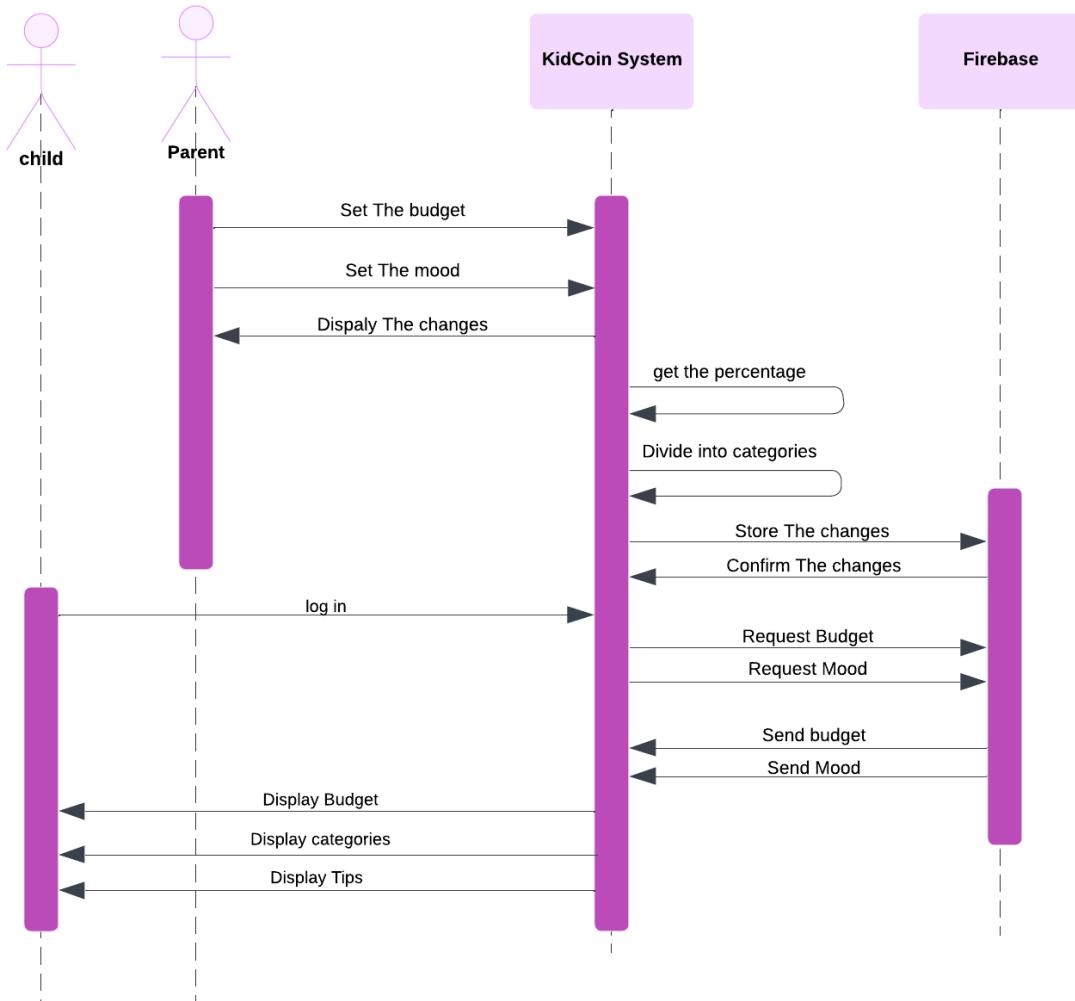
Test Case Name: Sprint #2 – Generating Money Management Tips

Test Case ID: Money Management Tips

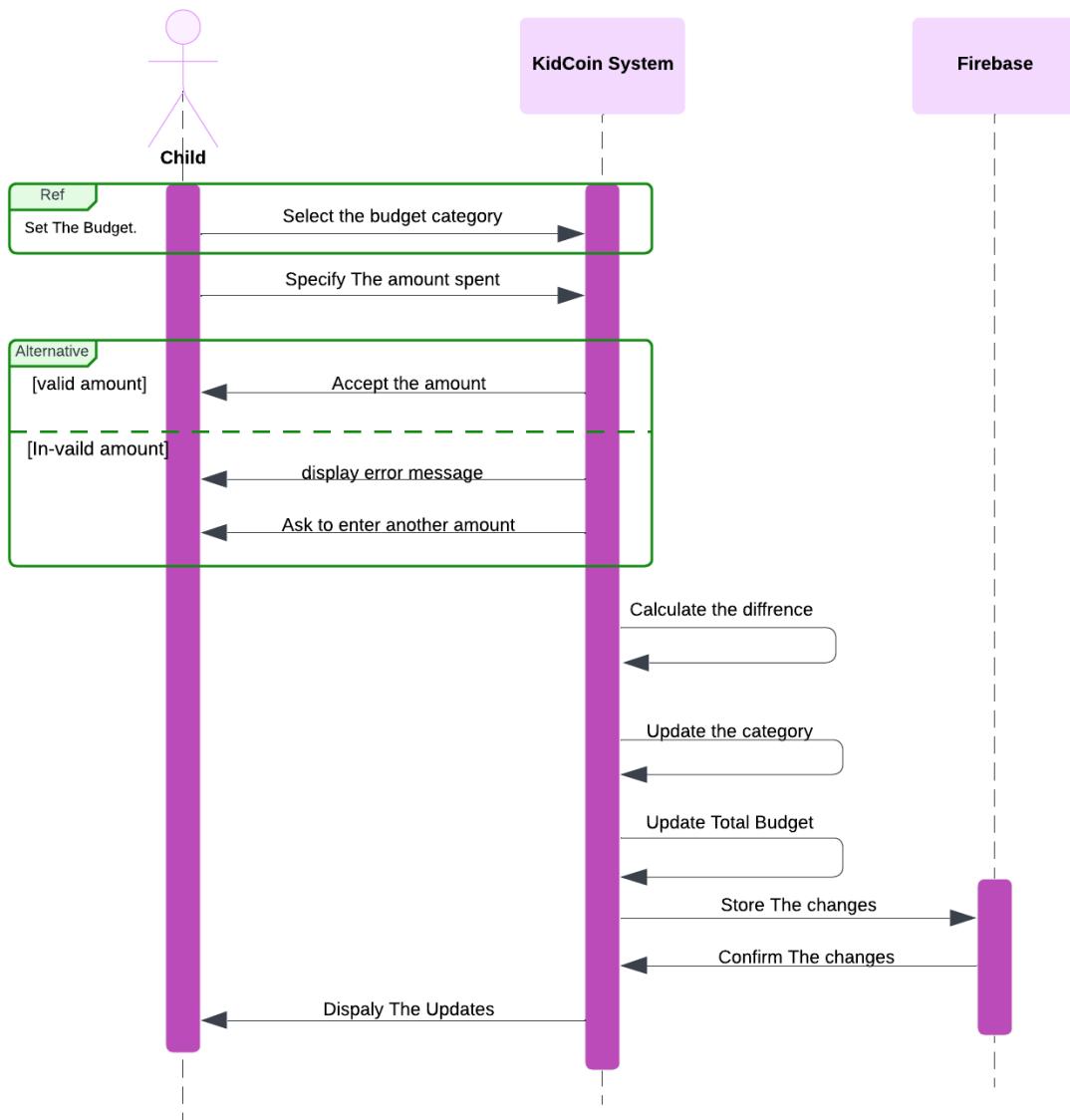
Test Case No.	Test Case Description	Expected Results	Outcome (Pass / Fail / Other (Comments))
TC001	Generate a tip based on the selected mood and category	The system displays a relevant tip to the selected mood and category	Pass
TC002	Child views tips generated based on mood selection	Tips should use simple language and concepts understandable by children within the category's box	Pass
TC003	Verify mood update changes the displayed tips	Changing the mood updates the tip content appropriately based on the new mood selection	Pass
TC004	Ensure categories provide relevant tips for selected mood	Each category (e.g., Savings, Food & Snacks, Entertainment, Needs) displays tips relevant to the mood	Pass

Sprint #2 – Diagrams

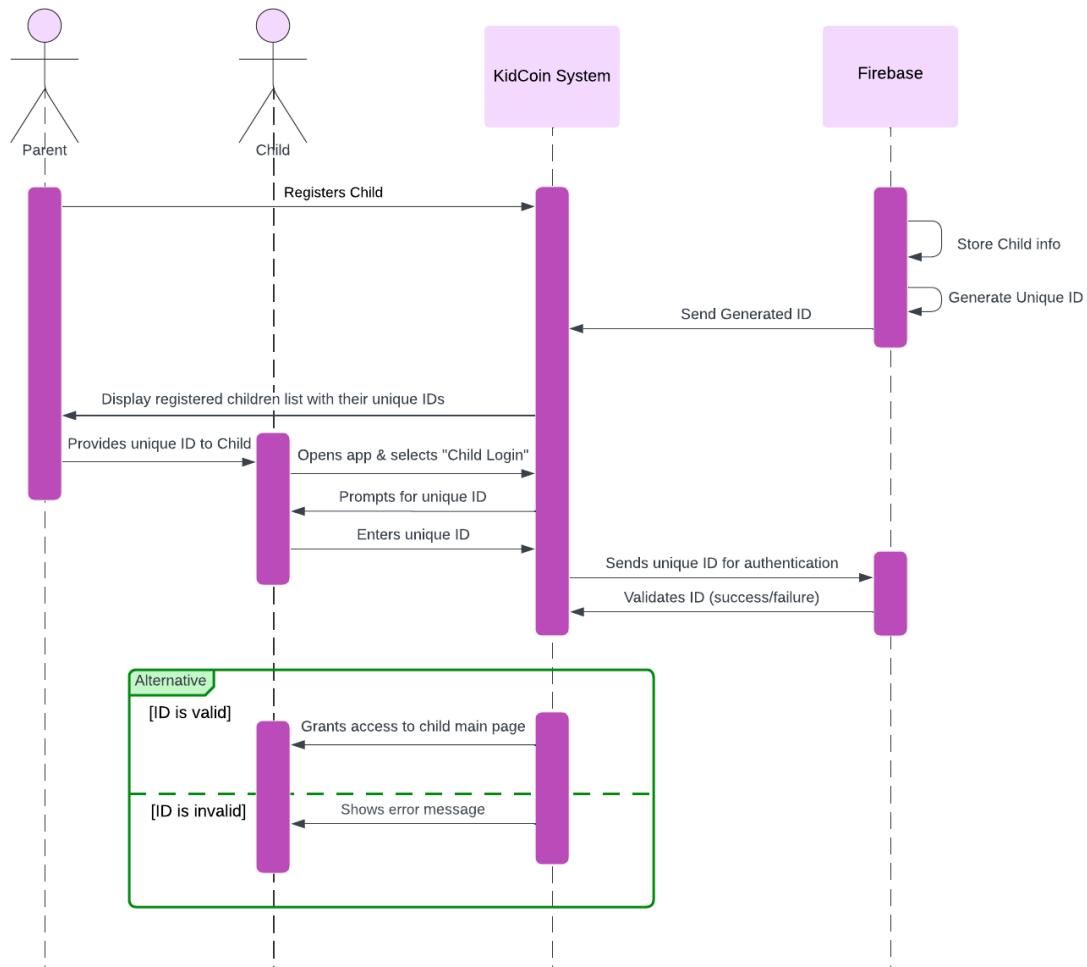
Set The Budget and mood and Tips



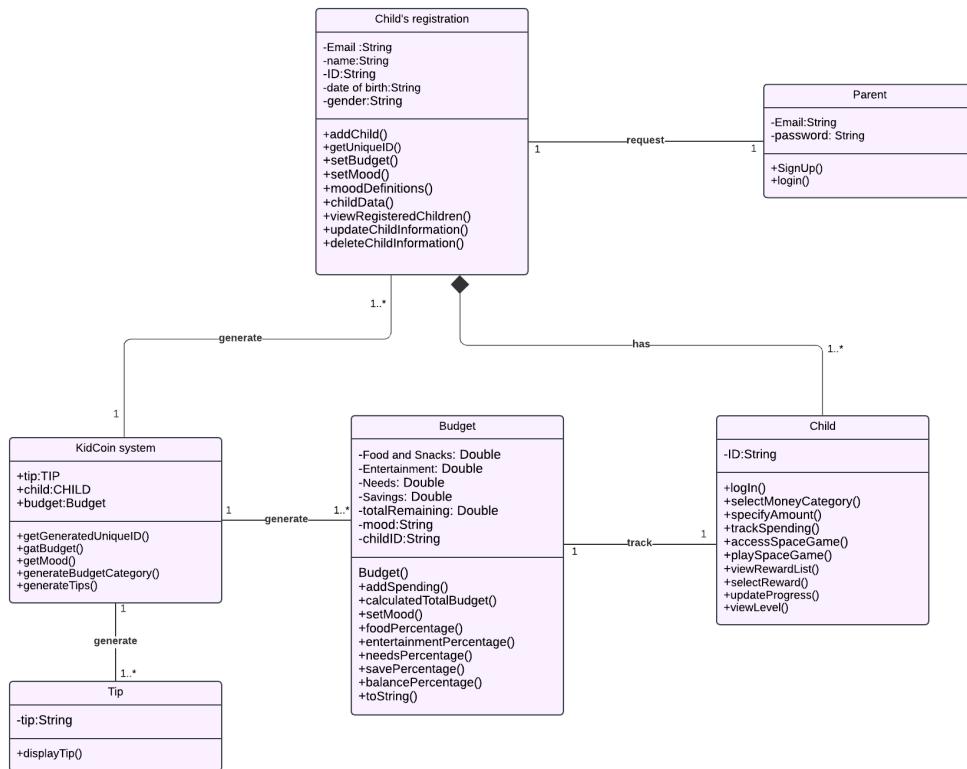
Spending The Budget



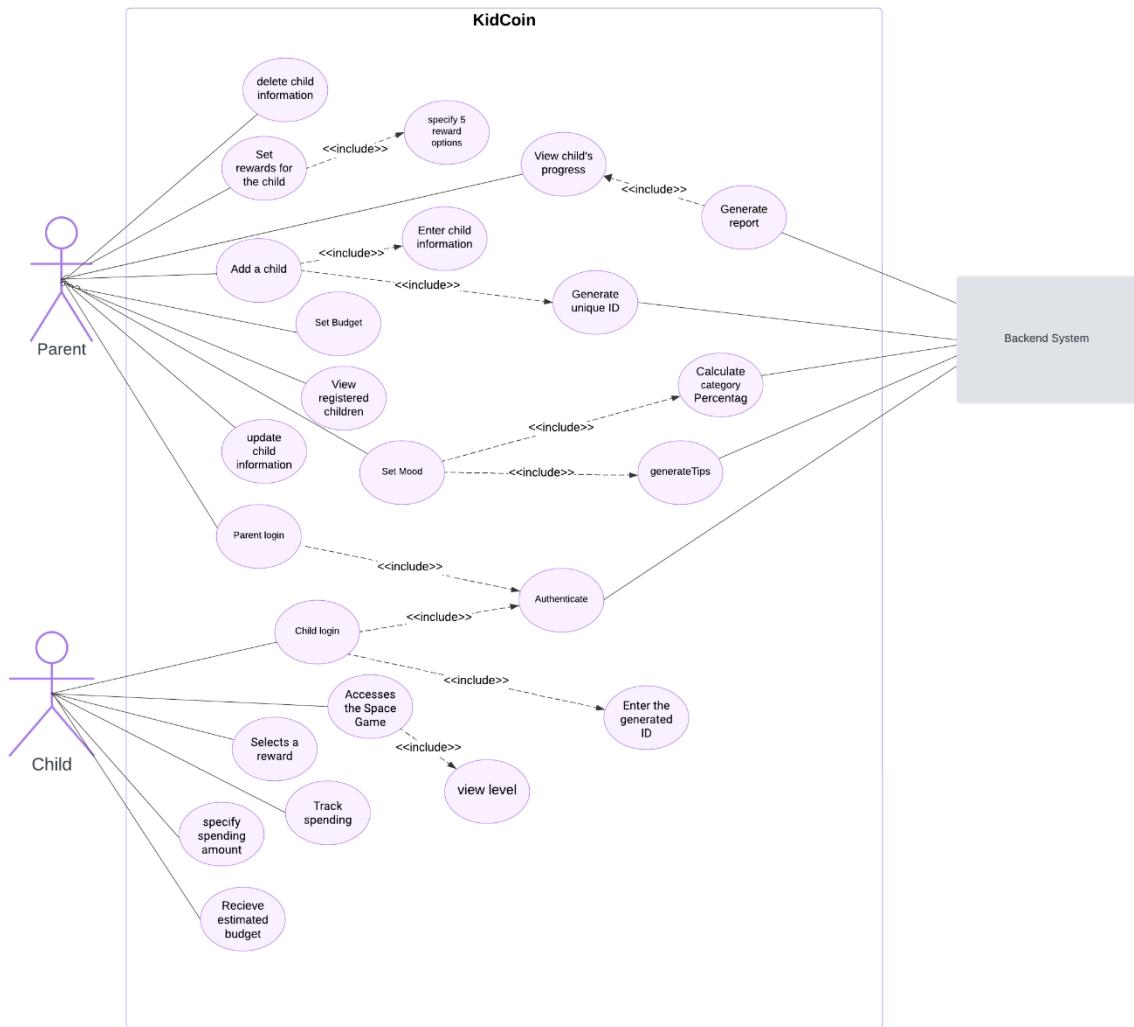
Child Log in



Class diagram



Use case diagram



Sprint #2 – Code

To visit KidCoin Repository please click here [↗](#)